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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,118	01/31/2001	Peter M. Maddocks	10004943-1	5383

7590 06/18/2007  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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KANG, INSUN

ART UNIT	PAPER NUMBER
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2193

MAIL DATE	DELIVERY MODE
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06/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/773,118

Applicant(s)

MADDOCKS ET AL.

Examiner

Insun Kang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 5, 8-10, 13-15, 34, 35, 39, 41, 42, 44, 46-49 and 52-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 8-10, 13-15, 34, 35, 39, 41, 42, 44, 46-49 and 52-56 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 11, 12, 19-22, 50, and 51 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to the amendment filed on 4/3/2007.
2. Claims 1, 2, 5, 8-10, 13-15, 34, 35, 39, 41, 42, 44, 46-49, and 52-56 are pending.

#### ***Allowable Subject Matter***

3. Claims 6, 7, 11, 12, 19-22, 50, and 51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 34, 35, 46-49, 52, and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Per claim 34, it is unclear how plural devices and associated commands in line 10 are related to the sequence. It is interpreted as: plural devices and associated commands of the displayed sequence.

Per claim 46, it is unclear what the displayed second first option and second option are and when/where they are displayed. Are they displayed after the display of a sequence of steps or a list of devices and commands? Furthermore, in line 10, the results of the execution are

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displayed in a first window. If so, it is unclear where the sequence and a list of devices and commands are displayed. In a different window?

As per claims 35, 47-49, 52, and 56, these claims are rejected for dependency on the above rejected parent claims.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 5, 8-10, 13-15, 39, 41, 42, 44, 46-49, and 52-56 under 35 U.S.C. 103(a) as being unpatentable over Blowers et al. (US Patent 6,724,409) hereinafter referred to as "Blowers" in view of Jenkins et al. (US Patent 6,002,868) hereafter Jenkins.

As per claim 1:

Blowers discloses:

- a graphical user interface (GUI) comprising: logic configured to execute GUI generation code and GUI user interaction handling code; and a display device in communication with said logic (i.e. "Graphical representations of possible hardware and possible machine vision tasks are displayed. Commands are received from a user to select desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired machine vision task," abstract)

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-wherein execution of the GUI generation code by said logic causes a first window and a second window to be displayed on the display device, said first window presenting a first panel configured to present a device and associated commands of a sequence as a hierarchical tree structure, each of the devices in the sequence being at a different hierarchical level than a hierarchical level of one or more commands associated with the device (i.e. developing a graphical, control-flow structure such as a tree structure...further includes the step of displaying graphical representations of possible hardware and possible machine vision tasks...receiving commands from a user to select desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired machine vision task. The method includes displaying the structure. The selected machine vision graphical representation is a node. The first control program is linked into the structure,” col. 3 lines 15-21; 25-35).

Blowers further discloses: the first window presenting a second panel configured to present one or more available commands for adding commands to the sequence, and said second window presenting results of execution of the sequence (i.e. “The task sequence generation window illustrated in Figs 7-9” and results window of Fig. 9 through a results interface 60).

Blowers discloses presenting commands but does not explicitly teach presenting plural devices. However, Jenkins teaches displaying plural devices in a GUI test scripting environment was known in the pertinent art, at the time applicant's invention was made, to display various devices associated with test scripts for testing (see Fig. 4A and 4C). It would have been obvious for one having ordinary skill in the art to modify Blowers' disclosed system to incorporate the teachings of Jenkins. The modification would be obvious because one having ordinary skill in

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the art would be motivated to display various nodes of devices for testing as suggested by Jenkins.

As per claim 2, the rejection of claim 1 is incorporated. Blowers further discloses that said first and second panels are simultaneously and fully viewable by a user (i.e. see Fig.7) as claimed.

As per claim 5, the rejection of claim 1 is incorporated. Blowers further discloses: each of the commands comprises an argument (i.e. col. 9 lines 1-6; “The task sequence generation window illustrated in Figs 7-9” and results window of Fig. 9 through a results interface 60) as claimed.

As per claim 8, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include a step associated with a displayed command (i.e. col. 9 lines 7-25) as claimed.

As per claim 9, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include a device associated with a displayed command (i.e. col. 9 lines 7-25) as claimed.

As per claim 10, the rejection of claim 1 is incorporated. Blowers further discloses that presented results include information indicating whether or not the displayed command was successfully executed (i.e. col. 9 lines 7-25) as claimed.

As per claim 13, the rejection of claim 1 is incorporated. Blowers further discloses that the GUI generation code and the GUI user interaction handling code are written in an object-oriented, platform-independent language (i.e. col. 6 lines 15-22) as claimed.

As per claims 14-15, it is the method versions of claims 1-2, respectively, and is rejected for the same reasons set forth in connection with the rejection of claims 1-2 above.

Per claim 39:

The rejection of claim 1 is incorporated. Blowers further discloses:

Execution of the sequence of commands causes communication with the devices identified by the sequence (i.e. col. 9 lines 7-25) as claimed.

Per claim 41:

The rejection of claim 1 is incorporated. Blowers further discloses:

A memory to store a file containing the results of the execution of the sequence, wherein the second window presents the results of the execution of the sequence in response to selection of a displayed option that enables opening of the file (i.e. col. 9 lines 7-25) as claimed.

Per claim 42:

The rejection of claim 1 is incorporated. Blowers further discloses:

-the execution of sequence causes testing of the devices identified in the sequence argument (i.e. col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60) as claimed.

Per claim 44:

The rejection of claim 14 is incorporated. Blowers further discloses:

-storing the results of execution of sequence in a file, and in response to receiving user activation of a displayed option, open the file to enable displaying the results in the second window

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argument (i.e. col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60; col 9 lines 1-7) as claimed.

As per claims 46, 47, and 49, and 52, these are the computer program versions of claims 5, 8-10, and 42, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 5, 8-10 and 42 above.

Per claim 48:

The rejection of claim 46 is incorporated. Blowers further discloses:

The program when executed causes the computer to remove at least one of a step, device, and command from the sequence in response to selection of a displayed third option (see Fig 7-9, edit option) as claimed.

Per claim 53:

The rejection of claim 1 is incorporated. Blowers further discloses:

wherein the first panel is configured to further present

at least a step of the sequence, the step including at least one of the devices and the one or more commands associated with the at least one device, wherein the step is at a hierarchical level that is different from the at least one device.

Per claim 54:

The rejection of claim 14 is incorporated. Blowers further discloses:

displaying the sequence comprises displaying the sequence as a hierarchical tree structure, each of the devices in the sequence being at a different hierarchical level of the hierarchical tree structure than a hierarchical level of one or more commands associated with the device (i.e. col.



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9 lines 1-6; “The task sequence generation window illustrated in Figs 7-9” and results window of Fig. 9 through a results interface 60; col 9 lines 1-7) as claimed.

Per claim 55:

The rejection of claim 14 is incorporated. Blowers further discloses:

wherein the sequence further comprises at least one step that includes at least one device and one or more commands associated with the at least one device, and wherein displaying the sequence comprises displaying the sequence as a hierarchical tree structure, the at least one step, the at least one device, and the associated one or more commands being at different hierarchical levels in the tree structure (i.e. col. 9 lines 1-6; “The task sequence generation window illustrated in Figs 7-9” and results window of Fig. 9 through a results interface 60; col 9 lines 1-7) as claimed.

Per claim 56:

The rejection of claim 46 is incorporated. Blowers further discloses:

wherein the sequence is displayed as a hierarchical tree structure containing the steps, devices, and commands, each step at a hierarchical level different from the respective hierarchical levels of the devices and commands included in the corresponding step (i.e. col. 9 lines 1-6; “The task sequence generation window illustrated in Figs 7-9” and results window of Fig. 9 through a results interface 60; col. 9 lines 1-7) as claimed.

8. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blowers et al. (US Patent 6,724,409) hereinafter referred to as “Blowers,” in view of Jenkins et

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al. (US Patent 6,002,868) hereafter Jenkins, and further in view of Weinberg et al. (US Patent 6,587,969) hereinafter referred to as "Weinberg."

Per claim 34:

Blowers discloses:

-a processor configured to execute logic configured to generate a graphical user interface (GUI), logic configured to interact with at least one human to machine interface, and logic configured to generate commands applied to control systems within one or more remote devices (i.e. "Graphical representations of possible hardware and possible machine vision tasks are displayed. Commands are received from a user to select desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired machine vision task," abstract)

-a display device in communication with said processor, wherein when said processor executes the logic configured to generate the GUI, a first window is displayed on the display device that displays both a sequence in a first portion of the first window and a list of one or more commands in a second portion of the first window, the displayed sequence being in a hierarchical tree structure in which a device and associated commands are at different hierarchical levels (i.e. "developing a graphical, control-flow structure such as a tree structure...further includes the step of displaying graphical representations of possible hardware and possible machine vision tasks...receiving commands from a user to select desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired

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machine vision task. The method includes displaying the structure. The selected machine vision graphical representation is a node. The first control program is linked into the structure,” col. 3 lines 15-21; 25-35) wherein said first window presents an option, the selection of which executes the sequence (i.e. “The task sequence generation window illustrated in Figs 7-9” and results window of Fig. 9 through a results interface 60).

Blowers discloses presenting commands but does not explicitly teach presenting plural devices. However, Jenkins teaches displaying plural devices in a GUI test scripting environment was known in the pertinent art, at the time applicant's invention was made, to display various devices associated with test scripts for testing (see Fig. 4A and 4C). It would have been obvious for one having ordinary skill in the art to modify Blowers' disclosed system to incorporate the teachings of Jenkins. The modification would be obvious because one having ordinary skill in the art would be motivated to display various nodes of devices for testing as suggested by Jenkins.

Blowers discloses when a second option is selected, the display device displays a second window displaying data regarding execution of the sequence, (i.e. “The task sequence generation window illustrated in Figs 7-9” and results window of Fig. 9 through a results interface 60). Blower does not explicitly disclose that the data regarding the execution of the sequence is a summary of information. However, Weinberg teaches that it was known in the art of software development and testing, at the time applicant's invention was made, to view the overall execution results without details. It would have been obvious for one having ordinary skill in the art of computer software development and distribution to modify the tree-based GUI testing system of Blowers to include summary information of the execution. The modification would

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be obvious because one having ordinary skill in the art would be motivated to view the overall information resulting from the execution as thought by Weinberg (See the displayed Execution Log window in Fig 3A, 4A, and 5F; "FIG. 5F illustrates the execution summary that is provided in a web-based implementation of the testing tool. The execution summary includes a tree representation ... or "report tree" of the test execution in the left pane of the screen," col 17, lines 1-45; see also col 3, lines 11-44; col 11 lines 33-50).

Per claim 35:

The rejection of claim 34 is incorporated. Blowers further teaches that the one or more remote devices comprise devices configured to house and manipulate data storage media (i.e. col. 7 lines 9-25) as claimed.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1, 2, 5, 8-10, 13-15, 34, 35, 39, 41, 42, 44, 46-49, and 52-56 have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 571-272-3724. The examiner can normally be reached on M-R 6:30-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MENG AI AN can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information

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